



Presentation to the Coal Policy Committee

16 June 2021



Presentation Outline

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2. Key Considerations for a New Coal Policy
3. New Policy Recommendation
4. The Elan Project
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 - Water Quantity
 - Water Quality
5. Final comments



About Atrum Coal

- Atrum Coal Ltd (Atrum) is a public company listed on the Australian Securities Exchange (ASX), focused on metallurgical coal exploration and mining.
- In March 2018, Atrum acquired Elan Coal Limited (Elan), a private Alberta corporation which is now a wholly owned subsidiary of Atrum, with lease applications in Alberta dating back to 2012.
- We are a responsible exploration and development company and in all our projects we are committed to land stewardship and minimizing our environmental footprint.
- Incorporating community and Indigenous knowledge in all phases of the mining life cycle is central to our projects.
- Our approach is reinforced by sustained, open and transparent communication with communities and government to uphold the highest standards in the resources industry.



Key Considerations for a New Coal Policy

Overview

A NEW COAL POLICY MUST...

- ensure the protection of Alberta's iconic mountain landscapes.
- reference and work alongside modern regulations and land use planning.
- acknowledge industry advancements that support protection of the environment.
- facilitate the responsible development of metallurgical coal resources on eligible lands without any historical bias.
- be flexible enough to ensure protected lands can be expanded where no viable metallurgical coal resource has been identified.
- ensure that environmental monitoring and water treatment facilities operate beyond the life of any proposed mine.



Key Considerations for a New Coal Policy

Shortcomings of the 1976 Coal policy and Category System

- No recognition of the environmental similarity between Category 2 and Category 4 lands.
- No recognition of individual project impacts, mitigation, management, and approach.
- No recognition of modern, responsible mining practices that have evolved to mitigate project impacts.
- No recognition of modern, post-1976 Coal Policy regulations that protect the environment while ensuring responsible development.
- No recognition of the limited metallurgical coal occurrences on category lands.



Key Considerations for a New Coal Policy

No recognition in the 1976 coal policy of the environmental similarity between Cat 2 and Cat 4 lands

Both categories have similar wildlife considerations

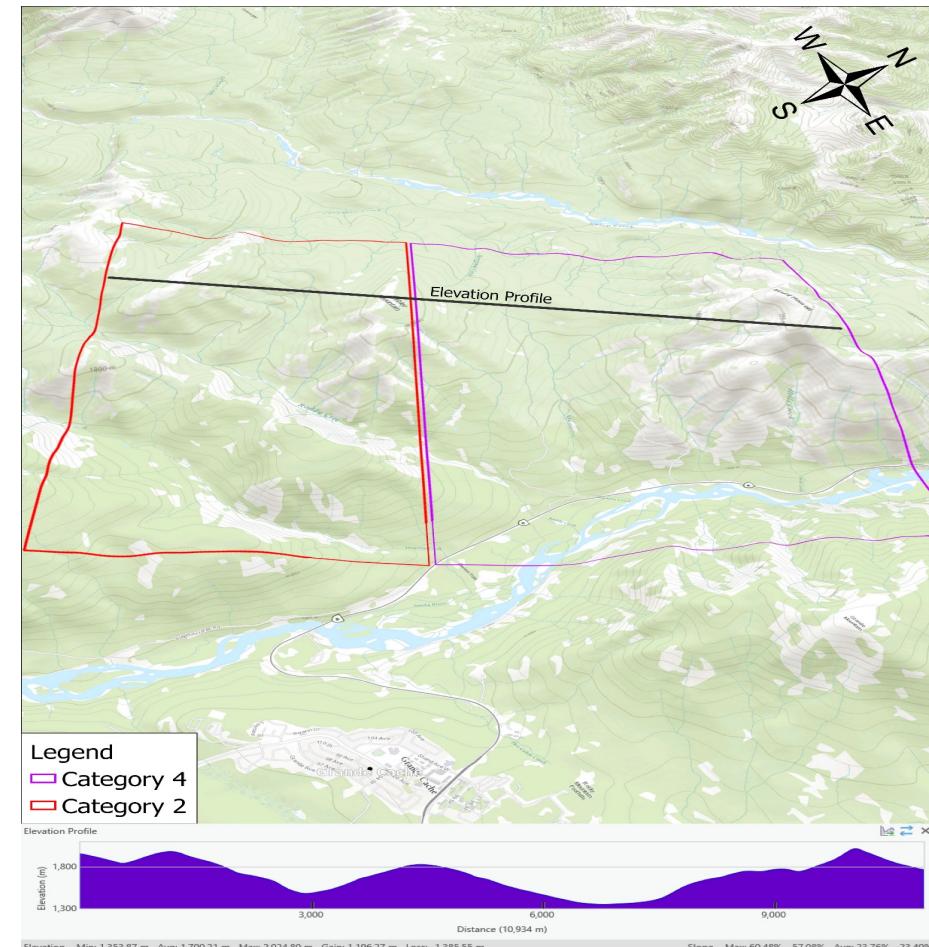
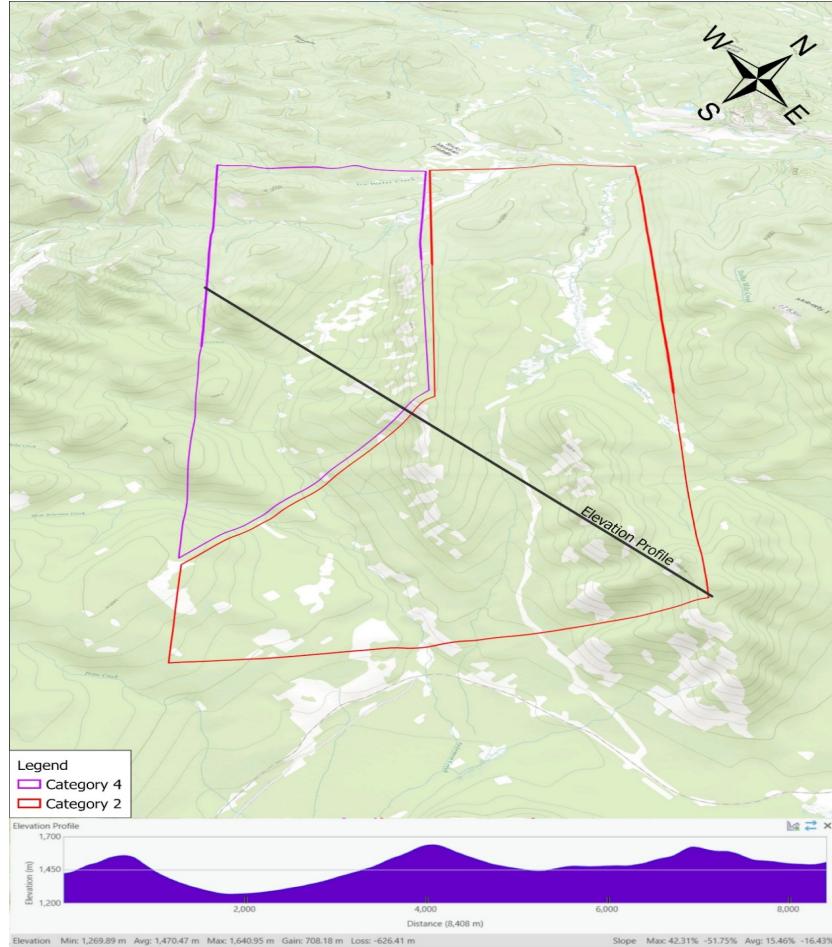
Percentage of Category Lands with Key Wildlife Considerations

	Grizzly Bear Range	Critical Habitat of Aquatic Species a Risk	Key Wildlife Biodiversity Zones	Mountain Goat and Sheep Areas
Category 2	95%	2%	21%	14%
Category 4	93%	1%	16%	10%

Key Considerations for a New Coal Policy

No recognition in the 1976 coal policy of the environmental similarity between Cat 2 and Cat 4 lands

Both categories have similar topographies and elevations



Northern and Central Alberta Category 2 lands vs. Category 4 lands



Key Considerations for a New Coal Policy

No recognition in the 1976 coal policy of individual project impacts, mitigation, management, and approach

- The existing system does not differentiate between projects on Category 2 lands with lower environmental effects than a project on Category 4 lands.
- The existing system does not provide a level playing field where each project can be assessed on its individual benefits and approaches to mitigation.
- The historical land categorizations contained in the 1976 Coal Development Policy do not benefit the environment or the economy.
 - Consistent policy treatment of all proposed projects, regardless of resource type, is the only way to ensure that Alberta's resources can be responsibly developed.



Key Considerations for a New Coal Policy

No recognition in the 1976 coal policy of modern, responsible mining practices that mitigate project impacts

- Modern mining begins with the end landform and land use in mind.
- Modern mining embraces progressive rehabilitation of landforms.
 - When one phase of mining is completed, reclamation begins immediately.
- Modern mining involves state-of-the-art methods for water treatment, based on well understood science, to remove selenium and nitrates.
- Modern mining contemplates the potential for shared infrastructure resulting in reduced impacts.
- The goal of rehabilitation and reclamation is to return the land to a state that fits local surroundings:
 - Ensuring populations of sensitive species through re-vegetation and re-forestation.
 - Based on input from local and Indigenous communities, to provide multi-generational, sequential land use.



Key Considerations for a New Coal Policy

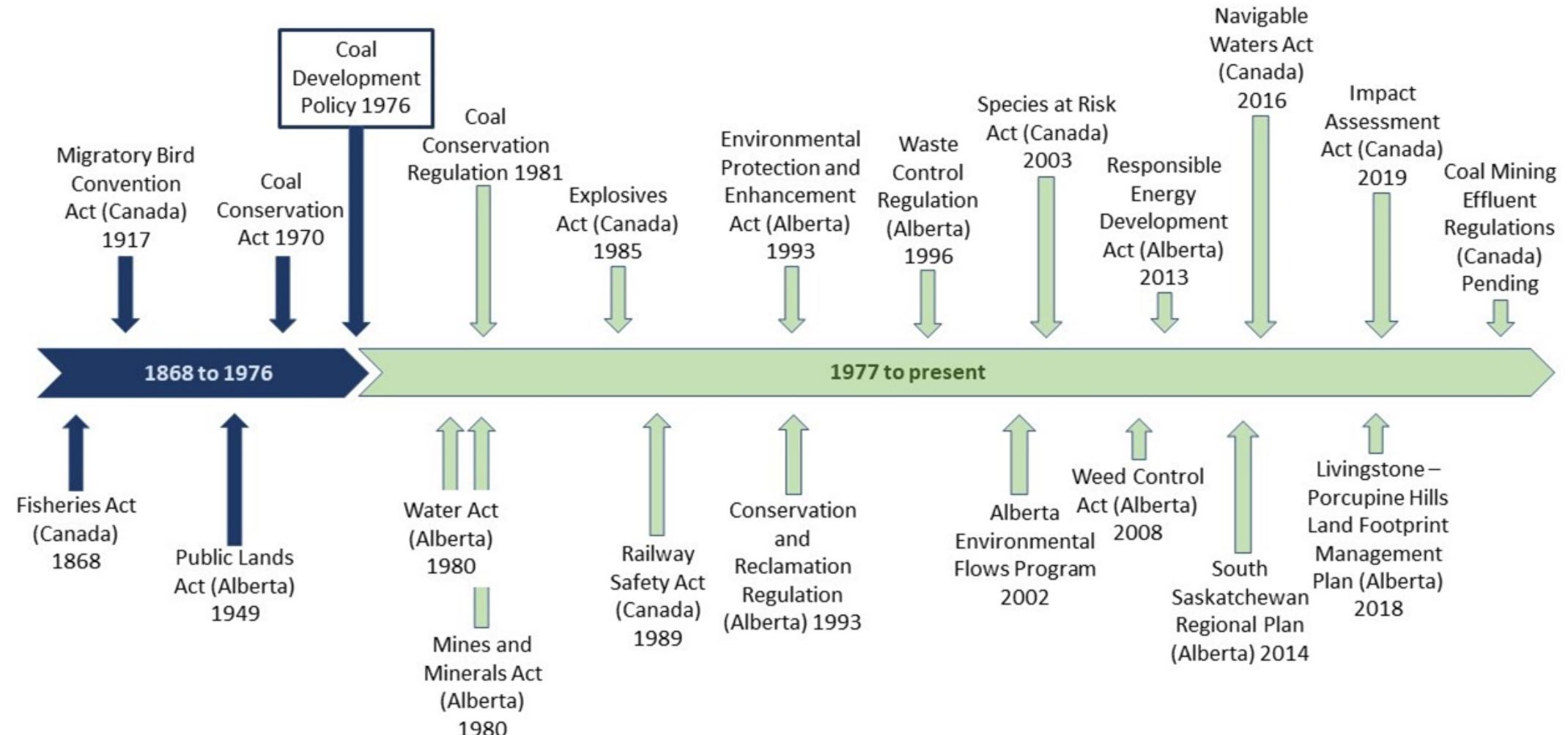
No recognition of legislation and regulation put in place after 1976

- The existing Policy provides no consideration for the current enhanced legislation and regulations, and the specific enforcements provided therein.
 - More recent environmental and energy legislation and the associated regulations provide stronger oversight, making Alberta one of the most stringent mining jurisdictions in the world.
- Examples of some of the post-1976 legislation that has been enacted or improved include:
 - Environmental Protection and Enhancement Act (1993)
 - Water Act (1980)
 - Conservation and Reclamation Regulation (Alberta) (1993)
 - South Saskatchewan Regional Plan (Alberta) (2014)



Key Considerations for a New Coal Policy

No recognition of legislation and regulation put in place after 1976

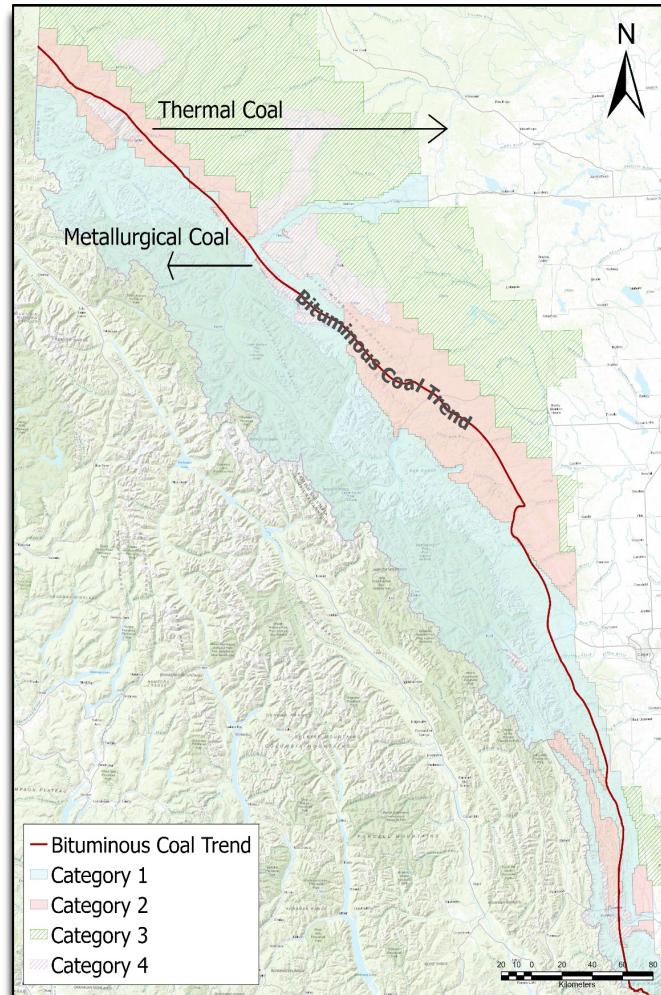




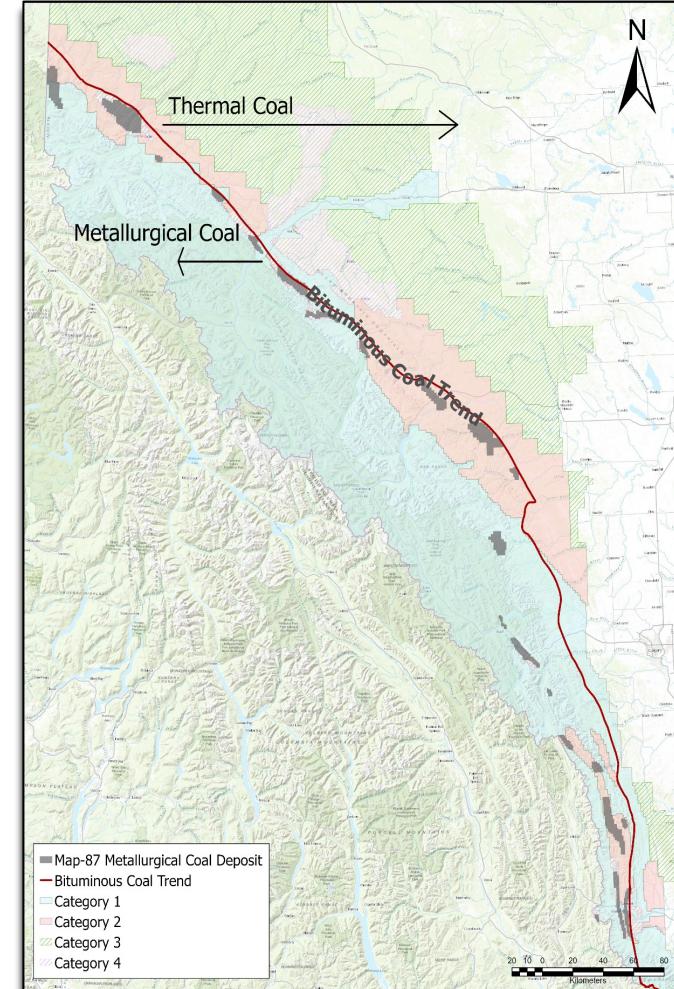
Key Considerations for a New Coal Policy

No recognition of the geological constraints on metallurgical coal occurrences on category lands

Metallurgical coal occurrences in Alberta coincide with more structured geology (temperature and pressure play a key role in creating high quality metallurgical coal).



Documented economic metallurgical coal occurrences comprise a very small subset of category lands.



(source: AER Report ST-31)



New Policy Recommendation

New zones to replace 1976 categories and provide greater clarity

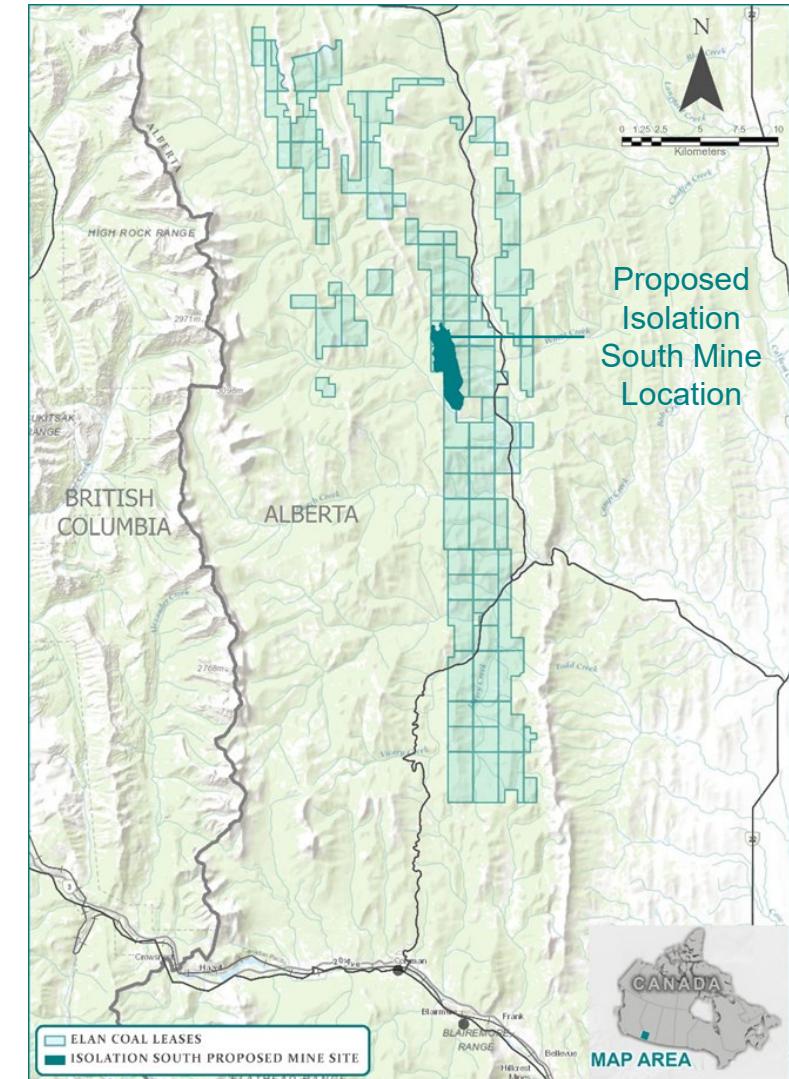
- Science, technology, and the legislative and regulatory framework have greatly surpassed the intent, purpose and value of the coal categories created in 1976.
- Alberta has the opportunity to support the environment and economy by creating two zones:
 - A **Non Development Zone** where resource projects may never be developed.
 - A **Potential Development Zone** where resource projects may be permitted by regulators including AB Environment, AB Energy, AER and the Government of Canada where applicable.
- Such a distinction would add clarity, provide certainty, reduce conflict, leverage science and technology, and diminish red tape.
- With input from First Nations, these zones could be drawn to expand and protect the mountain ranges and major watercourses included in 1976's Category 1 Lands while simultaneously allowing Alberta to build its economy by applying world leading governance and best practices to the foothills and other terrain now subjectively assigned to Categories 2 to 4.



The Elan Project

Overview

- The Elan Project area is located north of Coleman, Alberta.
 - Proposed mine based on the Isolation South coal deposit covering approximately 2,000 acres (800 hectares).
- The Elan Project land tenements were issued by the Government of Alberta to Elan Coal Ltd between 2012 and 2013.
- Coal leases do not necessarily mean mines will be developed.
 - Natural resource exploration requires feasibility studies and rigorous environmental review to determine whether the resources owned by Alberta can be responsibly and economically developed.



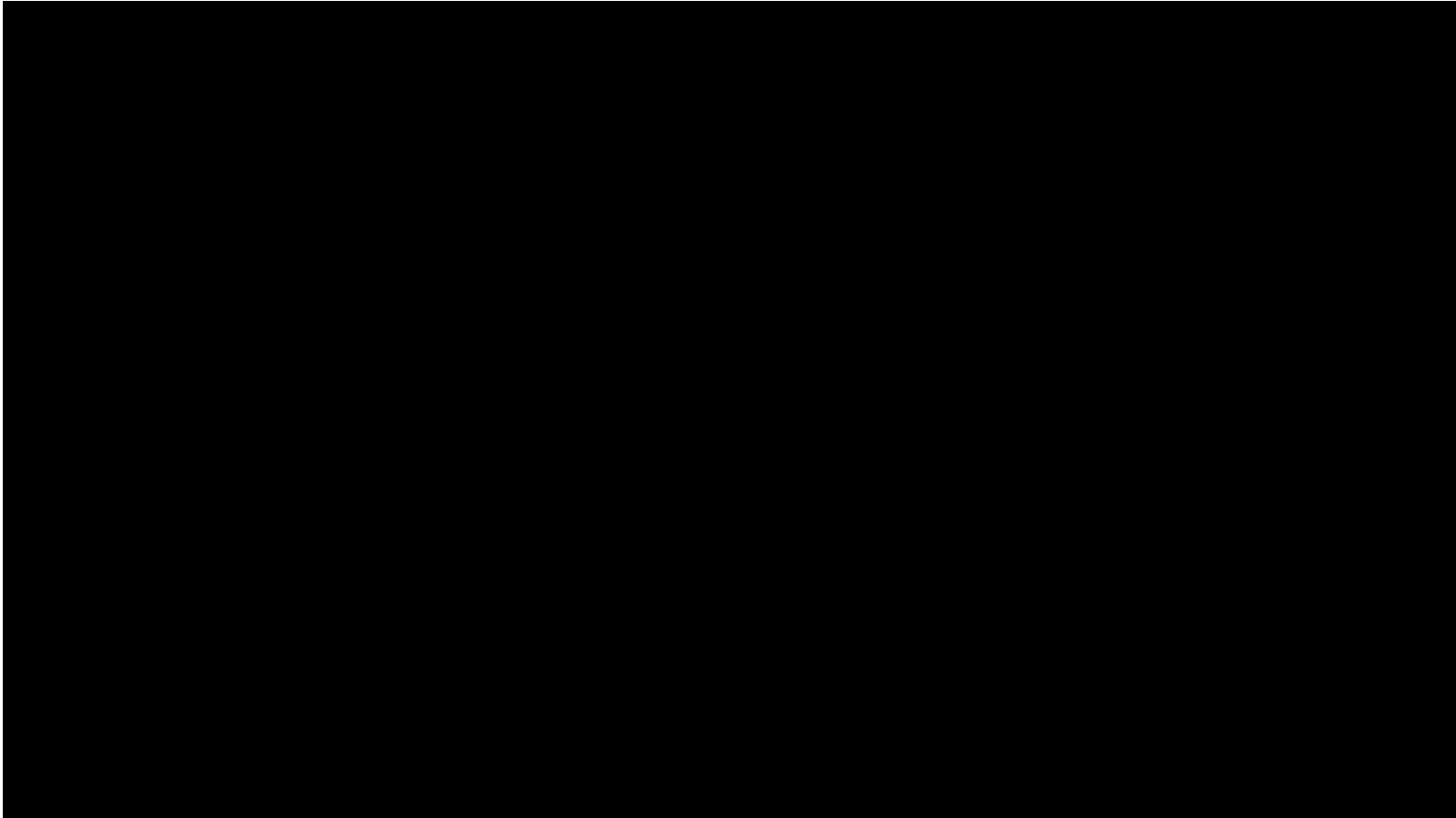
Elan Project area map – Southern Alberta



The Elan Project

Landscapes

- As a responsible mineral developer, our planning starts with the return of the proposed mine site to a natural habitat able to support sustainable, multi-generational land use.
- Our development plan is guided with the end of mine life in mind, leaving a rehabilitated site that is consistent with the surrounding natural landscape.





The Elan Project

Water Consumption

- Alberta Environment and Parks has stated that water allocations within the Oldman River have not changed, and no new allocations will be granted to mining projects.
 - Access to existing allocations continues to be a major component of Alberta's "Water for Life" strategy.
- Alberta's water priority system ensures existing water users such as municipalities, farmers and ranchers maintain the priority of their licenses and always have access to their water allocation.
- The *Water Act* and the *Alberta Environmental Flows Program* maintain provisions to ensure that water flows always support the needs of the environment as well as existing licenced users.



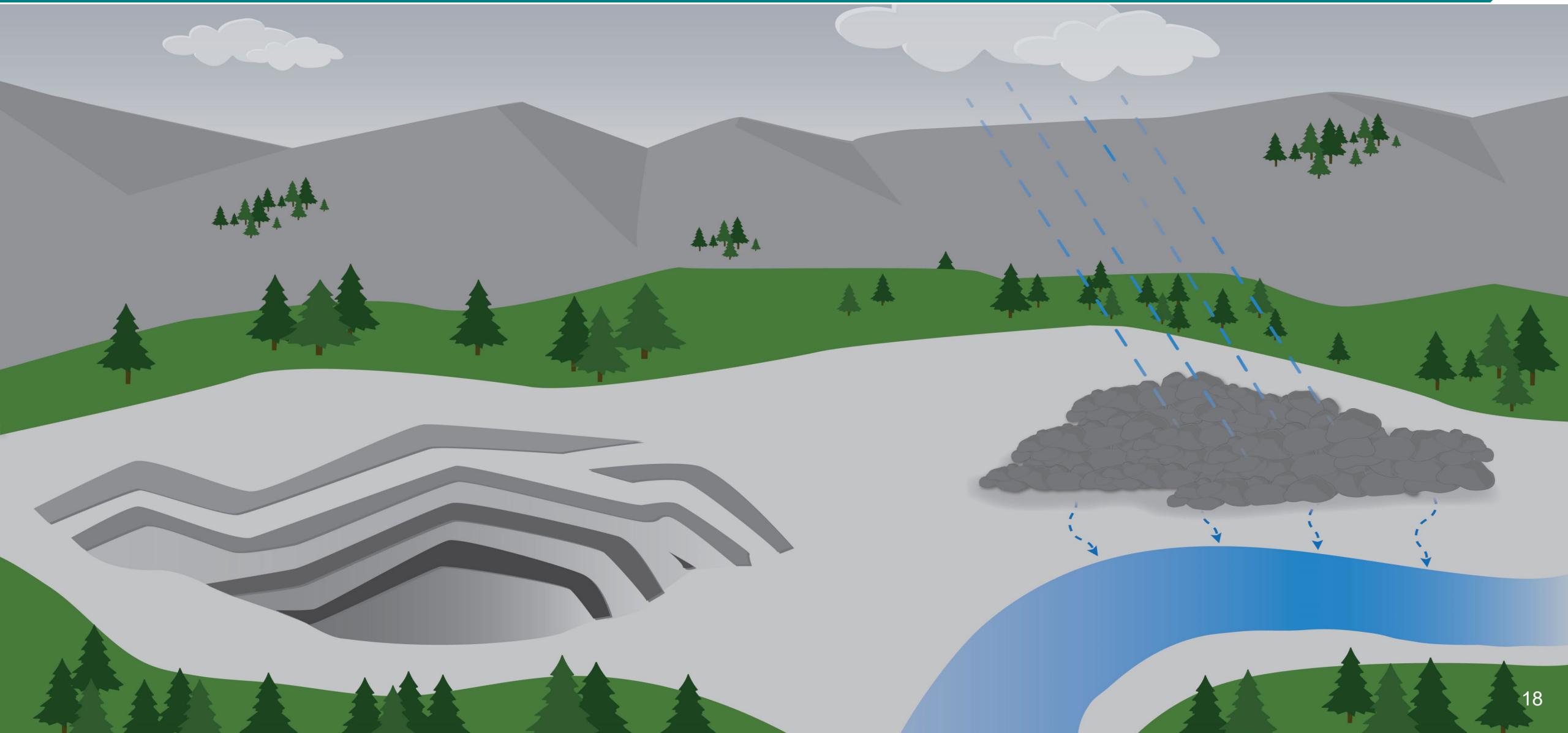
The Elan Project

Water Quality

- Our plans are to ensure no untreated water is ever released.
 - Modern practice is to capture and treat any water that is affected by mining activity.
- Science and technology exist to remove selenium and nitrates from water affected by mining activities.
- Our project design and operations will prioritize maintaining water quality parameters (including selenium and nitrates) at their natural levels.
- We will work with Alberta Environment and other regulators to ensure that any discharge of treated water meets the stringent parameters established by both provincial and federal authorities.

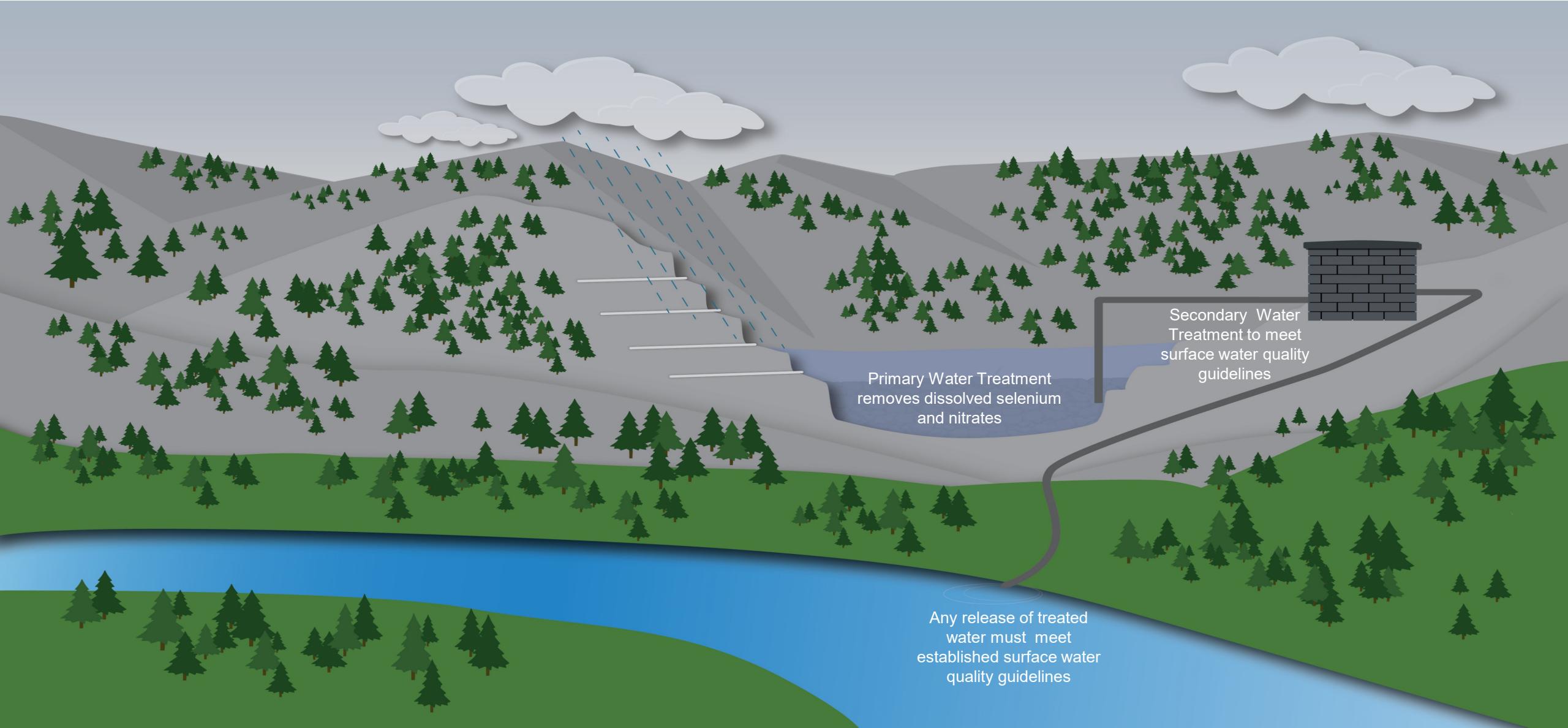


Historical mining practices allowed water affected by mining to be released directly into the environment (this is no longer permitted by regulators)





Modern mining practices capture and treat water affected by mining





Final Comments

Overview

- A new, modern coal policy should:
 - Ensure the protection of water and landscapes, reference modern regulations and acknowledge industry advancements that support responsible development of resources.
 - Seek to establish confidence among Albertans that a robust regulatory framework is in place to ensure environmentally responsible development.
- Atrum recommends that the new policy should include a simplified land category system that can potentially see more lands protected.
- Atrum acknowledges its responsibility to protect the environment and welcomes the opportunity to provide responsible economic opportunities for all Albertans. Developing a new coal policy that addresses key concerns and corrects common misconceptions can achieve these objectives.

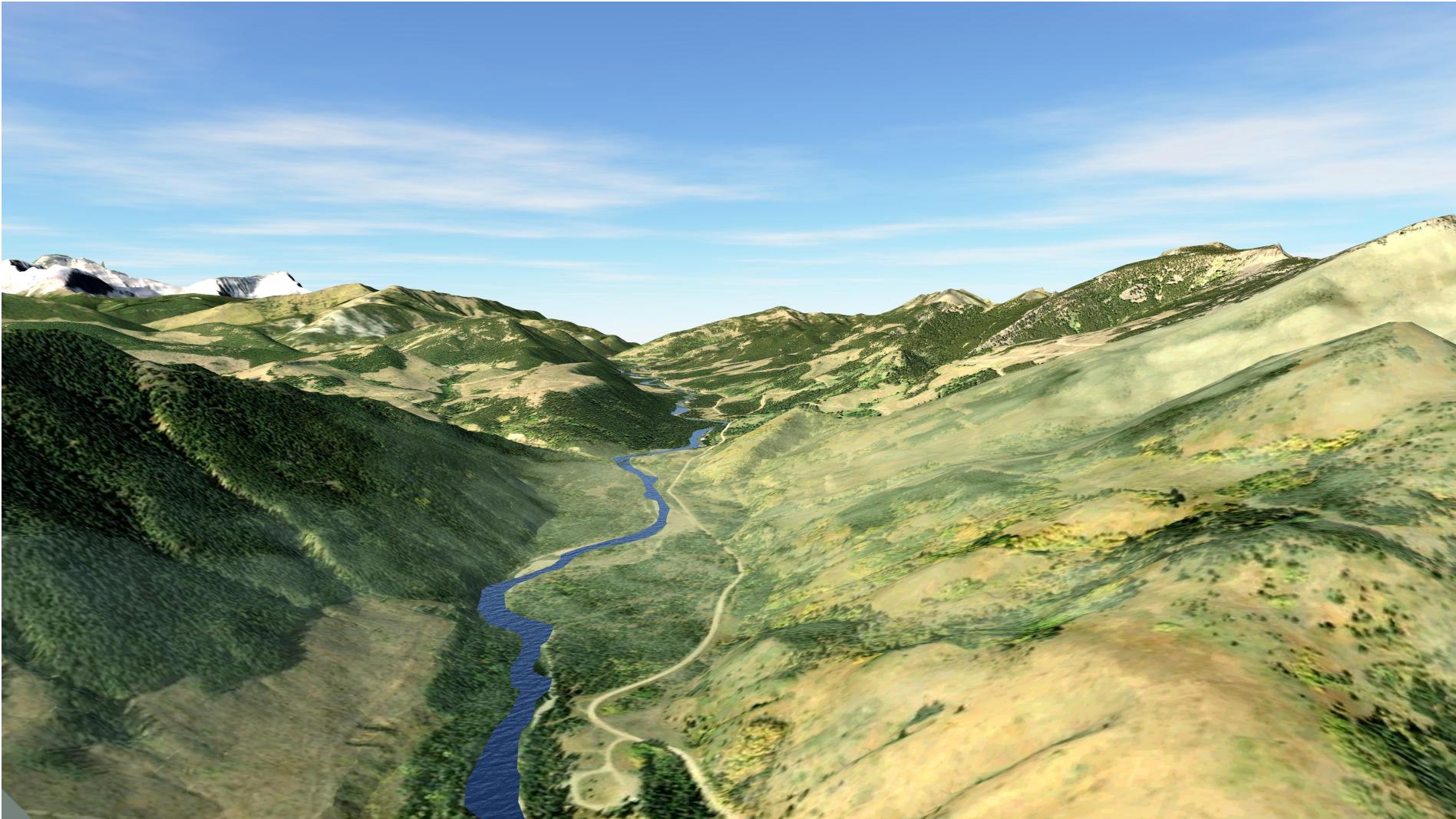


Supplemental slides



Rehabilitation Graphics

Before Mining





Rehabilitation Graphics

After Mining

